

FIG 1

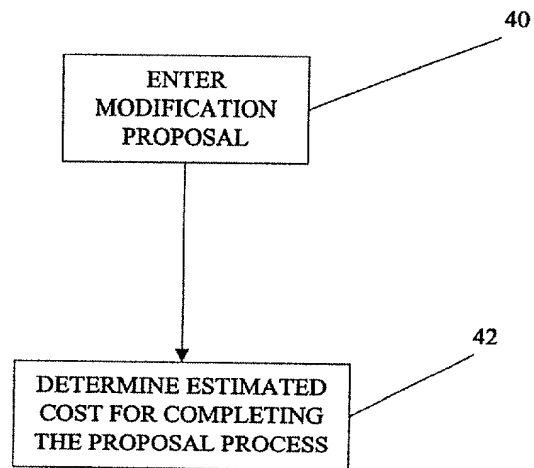


FIG 2

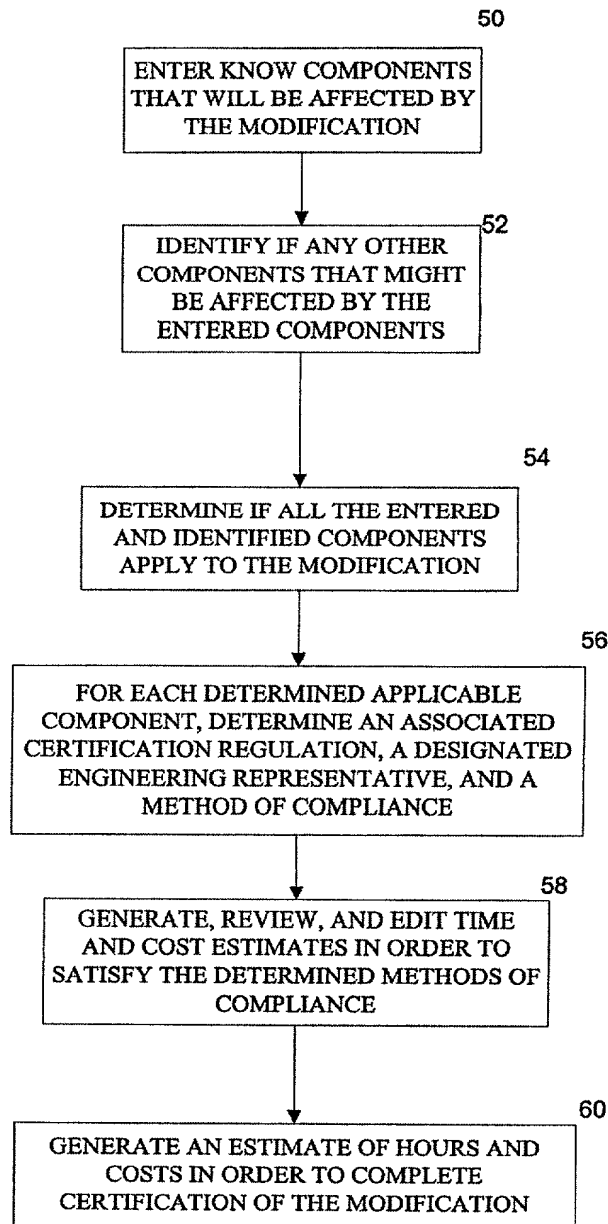


FIG. 3

FIG. 4

TOTOT 20492660

Certification Quote
File Edit View Go Communicator Help

Back Forward Reload Home Search Netscape Print Security Stop

THE CERT QUOTE 1002

New Project General Project Info Impacted Commodities Assess FARs/JARs Cert Deliverables Cert Methods Estimate Cert Cost Reports

GENERAL PROJECT INFORMATION for Project -4767
Define general project information including known affected commodities and specific airplane models to be modified.

Name: Last Cruz First Lisa
Proposal Description: Hawaiian Airlines 767 Interior Mod
Start Date: 4/15/01 End Date: 4/15/02 (Valid format MM/DD/YYYY)

Model Type(s):
737-100
737-200
737-200C
737-300
737-400
737-500
737-600
737-700
737-800
747-100
747-100B SUD
747-200B
747-200C
747-200F
747-300

124 124 126 128 130 132 136 138

Save & Proceed Delete

FIG. 5A

146

146

148

168

164

160

FIG. 6

Certification Quote Working Page

File Edit View Go Communicator Help

Back Forward Reload Home Search Netscape Print Security Stop

THE RETROFIT TOOL

Impacting for project - 476Z

New Project	General Project Info	Impacted Commodities	Assess FARs/JARS	Cert Deliverables	Cert Methods	Estimate Cert Cost	Reports
Potential Impact							
ECS Electrical/Electronic Emergency equipment Galleys & BFE Monuments General and emergency lighting Lavatories Linnings, ceilings, air grills, floor Misc. Payloads (curtain tracks, close out seals, Lt pockets, a/c) Oxygen systems		153	1100a 1100b	154	100c 100d	150	No Impact Audio reproducers, multiplexer, F Control units, monitors, TV, PFIS Crew Rest Escape systems Flight Deck IFE Provisions In-seat phones Insulation Landscape cameras Save & Proceed
Likely Impacts							
Crew Rest Galleys & BFE Monuments Lavatories PSS, cabin lighting, monitor & controls Seats - Attendant Seats - Passenger		160					
Possible Impacts							
Audio reproducers, multiplexer, PRAM Control units, monitors, TV, PFIS, Projectors, Video Ent. Player General and emergency lighting IFE Provisions Insulation Linnings, ceilings, air grills, floor		168					Helper Questions

1. Move commodities from 'potential impact' to either 'impacting' or 'no impact'
2. For each impacted commodity, use the lower screen as a guide of potential certification impacts on other commodities.
3. Use the command function to restore issues and concerns for specific commodities.

Impacted Commodities -
A modification to one commodity will often impact certification requirements of adjacent commodities.

Add/Update Com Comments
Attached comment

Back Reload Home Search Netcape Print Security Help

THE BOEL-1-1007

New Project General Project Info Impacted Commodities Assess FARs/JARs Cert Deliverables Cert Methods Estimate Cert Cost Reports

Impacting for project - 476Z

ECS
Electrical/Electronic
Emergency equipment
Galley & BFE Monuments
General and emergency lighting
Lavatories
Linings, ceilings, air grills, floor
Misc. Payloads (curtain tracks, close out seats, Lit packs)
Oxygen systems

Add/Update Com Comments

*Attached comment

Impacted Commodities -
A modification to one commodity will often impact certification require adjacent commodities.

Relationships
Physical/Spatial
Functional
Safety

Questions
1. Does this commodity affect the other?
2. Is it in, on, next to, or affected by attachment?
3. Does it affect crew interface/action?
Does it affect another functional discipline?
Does it affect the crashworthiness of interior arrangement?

Potential Impact
Wall phones, cabin telephone units, bearer systems, fax

No Impact
Audio reproducers, multiplexer, Control units, monitors, TV, PFIS
Crew Rest
Escape systems
Flight Deck
IFE Provisions
In-seat phones
Insulation
Landscape cameras
[Save & Proceed]

Handling or no impact
Is a guide of potential certification impacts on other commodities, and for specific commodities.

Eligible Impacts
Crew Rest
Galley & BFE Monuments
Lavatories
PSS, cabin lighting, monitor & controls
Seats - Attendant
Seats - Passenger

Audio reproducers, multiplexer, PRAM
Control units, monitors, TV, PFIS, Projectors, Video Ent. Player
General and emergency lighting
IFE Provisions
Insulation
Linings, ceilings, air grills, floor

Helper Questions

Fig. 7

8
F16

214

[illegible]

TOTOT" E0492660

Fig. 9.

Certification Deliverables		Access FARs / JARs		Cert Deliverables		Cert Methods		Estimate Cert Cost		Reports	
New Project	General Project Info	Impacted Commodities	Access FARs / JARs	Cert Deliverables	Cert Methods	Estimate Cert Cost	Reports	Save & Proceed			
Project - 4767		230		238		240					
Category		Certification Deliverables		Accounting FAA Form							
Descriptive data		<input checked="" type="checkbox"/> Drawing, sketches, marked photographs, process specifications, written descriptions, installation instructions, etc. (reference AC 21-40, section 5-2).		8110-3							
Substantiating or compliance data		<input checked="" type="checkbox"/> Analyses <input checked="" type="checkbox"/> Similarity <input checked="" type="checkbox"/> Test or Demonstration proposal or detail plan <input type="checkbox"/> Test or Demonstration report <input type="checkbox"/> Conformity Inspection Requests		8110-3 8110-3 8110-3 8110-3 8120-10 & test drawings 8110-3							
Aircraft operational & maintenance content		<input type="checkbox"/> AFM content revisions or other operational limitation <input checked="" type="checkbox"/> Minimum Maintenance Equipment List (M MEL) content revisions <input type="checkbox"/> Certification Maintenance Requirement (CMR) and associated Scheduled Maintenance Task (SMT) revisions. (Reference AC 25-19).		Content submittals, and reviews by focal and DER are required.							
Administrative		<input checked="" type="checkbox"/> Project initiation familiarization meetings <input checked="" type="checkbox"/> Technical Specialists meetings, typically multiple meetings are required		No FAA form No FAA form No FAA form							

230

238

TOTAL: 20492660

File Edit View Go Communicator Help

Back Forward Reload Home Search Netscape Print Security Stop

THE CERT PROGRAM

New Project	General Project Info	Impacted Commodities	Assess FARs/JARs	Cert Deliverables	Cert Methods	Estimate Cert Cost	Reports
-------------	----------------------	----------------------	------------------	-------------------	--------------	--------------------	---------

Project - 476Z

Is Change: MAJOR or MINOR

255

Foreign Certifications

250

Service Bulletin

254

NTC

262

DPS

264

TSO

STC

Save & Proceed

Selected UnSelected

\$16.10

TOTOT" E044/660

FIG. 11.

Price et al
Attorney Docket No. BOEI-1-1007
METHOD FOR ACCELERATED RETROFIT CERTIFICATION
Filed: October 11, 2001
Express Mail No. EL476256024US
Sheet 11 of 15
Black Lowe & Graham, PLLC
(206) 381-3300

Certification Deliverables are...		Estimate				Traceability
CAA familiarization meeting and follow-up technical meetings		<input type="checkbox"/> mtrs	<input type="checkbox"/> mtr	<input checked="" type="checkbox"/> 1	people	
Certification review with customer, trips & visits		<input type="checkbox"/> visits	<input type="checkbox"/> mtr	<input checked="" type="checkbox"/> 1	people	
		<input type="checkbox"/> trips	<input type="checkbox"/> mtr	<input checked="" type="checkbox"/> 1	people	
Develop certification strategy/plan and submit to certification group		<input type="checkbox"/> plan	<input type="checkbox"/> pages	<input checked="" type="checkbox"/> 8	hr/pg	FAA order 8110.4 paragraph G
Each DER requires a STC 8110-3 signoff		<input type="checkbox"/> 8110s	<input type="checkbox"/> mtr			
		<input type="checkbox"/> # of mtr	<input type="checkbox"/> mtr			
Engineer participation in "airplane survey" to validate initial airworthiness configuration		<input checked="" type="checkbox"/> trips	<input type="checkbox"/> mtr	<input checked="" type="checkbox"/> 1	people	
Remote Certification		<input type="checkbox"/> trips	<input type="checkbox"/> mtr	<input checked="" type="checkbox"/> 1	people	
Requires Notification Letter input to certification group proposing "DER Project"		<input type="checkbox"/> input	<input type="checkbox"/> mtr			FAR 21.83, 21.87, 21.113
Requires Notification Letter input to certification group, possible "FAA Project"		<input type="checkbox"/> input	<input type="checkbox"/> mtr			FAR 21.19, 21.21, 21.83, 21.87, 21.113
Total Hours:		<input type="checkbox"/>				
Foreign regulatory agency fees		<input type="checkbox"/> 300	<input type="checkbox"/> per hr	<input checked="" type="checkbox"/> 40	mtr	

2702 271

274 Foreign Certification 276 280

282

Save & Proceed

Grand Total: ☐

TOTAL = 60492660

FIG. 12

Price et al
Attorney Docket No. BOEI-1-1007
METHOD FOR ACCELERATED RETROFIT CERTIFICATION
Filed: October 11, 2001
Express Mail No. EL476256024US
Sheet 12 of 15
Black Lowe & Graham, PLLC
(206) 381-3300

Certification Quote Working Page		File Edit View Go Communication Help		Back Forward Reload Home Search Newspaper Print Security		THE CERT QUOTE TOOL		New Project General Project Info Impacted Commodities Assess FARs/JARs Cert Deliverables Cert Methods Estimate Cert Cost Reports		Save & Proceed	
Project - 476Z											
Certification Deliverables are...											
CAA familiarization meeting and follow-up technical meetings	1	mgs	X	0	mtr	X	1	people	Tracability		
Certification review with customer, trips & visits	3	visits	X	16	mtr	X	1	people			
Develop certification strategy/plan and submit to certification group	5	trips	X	32	mtr	X	1	people			
Each discipline's DER requires a Service Bulletin 8110-3 signoff	1	plan	X	25	pages	X	8	hr/po	MOA paragraph V 8 & VII B		
Issue Paper (IP) response for controversial issues	20	8110s	X	4	mtr						
Only the Interior Arrangement DER or the prime DERs require 8110-3 signoff for the Service Bulletin	6	# of	X	20	mtr						
Remote Certification	2	IPs	X	8	mtr						
Requires Program Letter of Definition input to certification group, possible "FAA Project"	1	DER	X	40	mtr				MOA paragraph V 8 & VII B 2.a		
Total Hours:	2	trips	X	80	mtr	X	1	people			
Grand Total:	0	L00	X	0	mtr				FAR 21.10, 21.21, 21.03, 21.07		

Fig. 13

Certification Deliverables are...										Estimate		Tracability	
CAA familiarization meeting and follow-up technical meetings										<input type="checkbox"/> msgs	<input type="checkbox"/> mtr	<input checked="" type="checkbox"/> 1	people
Certification review with customer, trips & visits										<input type="checkbox"/> visits	<input type="checkbox"/> mtr	<input checked="" type="checkbox"/> 1	people
										<input type="checkbox"/> trips	<input type="checkbox"/> mtr	<input checked="" type="checkbox"/> 1	people
Develop certification strategy/plan and submit to certification group										<input type="checkbox"/> plan	<input type="checkbox"/> pages	<input checked="" type="checkbox"/> 6	trpg
Each discipline's DER requires a STC 8110-3 signoff										<input type="checkbox"/> 8110s	<input type="checkbox"/> mtr		
										<input type="checkbox"/> # of tr	<input type="checkbox"/> mtr		
Engineer participation in "airplane survey" to validate initial airworthiness configuration										<input checked="" type="checkbox"/> trip	<input type="checkbox"/> mtr	<input checked="" type="checkbox"/> 1	people
Issue Paper (IP) response for controversial issues										<input type="checkbox"/> IP's	<input type="checkbox"/> mtr		
Remote Certification										<input type="checkbox"/> trips	<input type="checkbox"/> mtr	<input checked="" type="checkbox"/> 1	people
Requires Notification Letter input to certification group proposing "DER Project"										<input type="checkbox"/> input	<input type="checkbox"/> mtr		FAR 21.93, 21.97, 21.113
Requires Notification Letter input to certification group, possible "FAA Project"										<input type="checkbox"/> input	<input type="checkbox"/> mtr		FAR 21.19, 21.21, 21.93, 21.97, 21.113
Total Hours:										<input type="checkbox"/>			

File Edit View Go Communicator Help

Back Forward Reload Home Search Netscape Print Security Stop

Supplemental Type Certification

Grand Total: 0

FIG. 14.

Price et al
Attorney Docket No. BOEI-1-1007
METHOD FOR ACCELERATED RETROFIT CERTIFICATION
Filed: October 11, 2001
Express Mail No. EL476256024US
Sheet 14 of 15
Black Lowe & Graham, PLLC
(206) 381-3300

File Edit View Go Communicator Help

Back Forward Reload Home Search Netscape Print Security Shop

THE CERTIFICATION TOOL

New Project

General Project Info

Impacted Commodities

Assess FARs/JARs

Cert Deliverables

Cert Methods

Estimate Cert Cost

Reports

320

324

322

Reports for Project - 4767

Reports are available to summarize the certification costs and also for performing detail analysis of specific issues.

Report	Type/Options
PME	<div>Quote Summary</div> <div>Estimate Cost Sheets</div>
Project Cert Deliverables	<div>Cert Deliverables</div>
Impacted Commodity Detail List	<div>Commodities sort selector</div> <div>DER sort selector</div> <div>FAR/JAR sort selector</div> <div>Method sort selector</div>
Potentially Impacted Commodities	<div>Comments</div>
Type Certificate Data Sheet	<div>TCDS web site</div>

350

Certification Quote Summary

Date: 8/6/2001

Proposal #: 4767 **Status:** In Work **Start Date:** 4/15/01

Estimator: Cruz, Lisa A **End Date:** 4/15/02

Proposal Description: Hawaiian Airlines 767 Interior Mod

Change (Major/Minor): Major

Airplane Specifics: 767-300

Certification Approach(s): Service Bulletin, Supplemental Type Certificate, Foreign Certification

Total (Cost) Man Hours*: 824 **Total Foreign regulatory fees:** \$12000

DER Types: Cargo Systems, Comm/Ant, ECS, Electrical, EMC/EMI, Escape Sys, Fire Contain, Flammability, Flight Manual, Interiors, Materials, Mechanisms, Oxygen Sys, PA/Entertain, Software, Stress, Structures, Water/Waste, Weights & Balance

FIG. 15.